

ABSTRACT

Problems such as thermal pole tip protrusion result from thermal mismatch between the alumina and pole material during the writing process. This, and similar problems due to inadequate heat dissipation, have been overcome by dividing the bottom shield into two pieces both of which sit on top of a non-magnetic heat sink. Heat generated by the coil during writing is transferred to the non-magnetic heat sink whence it gets transferred to the substrate. With this approach, the head not only benefits from less field disturbance due to the small shield but also improves heat dissipation from the additional heat sink